



The Gap Between a Rule Change and an Abstractor's Awareness Is Where Errors, Lost Revenue, and Bad Data Live.

Lighthouse Ensures Every Case Is Coded Against the Latest Registry Definitions.

A Multi-Entity Health System | CathPCI Registry | NCDR

The case looked straightforward. A patient with left ventricular dysfunction, a condition where the heart is not pumping enough blood out to the body's organs. The abstractor had seen cases like this hundreds of times. She reviewed the clinical documentation, weighed the data, and made her call: mild.

She was confident. She had the experience. She had the training. There was no hesitation.

Then Lighthouse flagged a different answer: moderate or severe.

She pushed back. Of course she did. She knew what she was doing. She had coded left ventricular dysfunction cases before, and the clinical picture in front of her pointed to mild. The AI had to be wrong.



48 Hours

So, she dug in. She pulled up the Lighthouse reasoning to see why the platform had reached a different conclusion. And that is when she saw it.

NCDR had updated its definitions for left ventricular dysfunction. The thresholds separating mild from moderate and severe had changed. The update had gone live two days earlier. Two days. She had not seen it yet. She had been coding from the prior definitions, the ones burned into her muscle memory from months of repetition.

Under the old rules, she was right. Under the current rules, she was wrong.

Lighthouse already had the new definitions in place. Not because someone manually updated the platform overnight. Because that is what the platform is built to do: stay current so the abstractor does not have to worry about a two-day gap between a rule change and her awareness of it.

NCDR updated its definitions for left ventricular dysfunction just two days before this case was abstracted. Lighthouse already had the new rules in place. The abstractor was still working from the prior version.



Why “Mild vs. Moderate” Is Not an Academic Distinction

If she had submitted the case as mild, it would have been wrong. Not a little wrong. Wrong in a way that matters.

Severity coding for left ventricular dysfunction affects DRG assignment, risk adjustment, and reimbursement calculations. Code a case as mild when it should be moderate or severe, and the health system potentially leaves money on the table. Multiply that across a year of cases and the revenue impact is real.

But the financial piece is only part of it. This health system uses its NCDR data actively. The abstraction team participates in monthly physician case reviews. They run business reviews with clinical leadership twice a year. They power PI projects and fulfill data requests from departments across the organization. Every coding decision feeds into those downstream activities. When the underlying data is wrong, every quality score, every benchmark comparison, every conversation with a physician about clinical performance starts from a flawed foundation.

Getting it right is not optional. It is the whole point.



“She Was Ready to Combat the AI”

Here is the part of the story that matters most.

This abstractor did not quietly accept the platform’s answer. She went in ready to prove Lighthouse wrong. She wanted to find the flaw. She had the experience, the credentials, and the confidence to challenge the machine. And that is exactly the kind of abstractor you want on your team.

But when she looked at the evidence, she changed her mind. Not because the AI intimidated her. Not because someone told her to defer to the technology. Because the data was right. The definitions had changed, Lighthouse had the current version, and the correct coding was moderate or severe.

She admitted afterward that she would have found the updated definitions eventually. But it would have taken a lot longer. Lighthouse got there first. And in the gap between “eventually” and “immediately,” errors get submitted, revenue gets missed, and data quality suffers.

“ It is a great tool to help with abstraction and I don’t see it taking over my role as an abstractor.

Clinical Abstractor



The Impact

Lighthouse Knew First

The Rules Changed. The Abstractor Hadn't Seen the Update. Lighthouse Had Already Applied It.

1 Case

Corrected Before It Became a Problem

Every Report It Touches

Monthly Reviews. Business Reviews. PI Projects.
National Benchmarks.

This Is What Hybrid Intelligence Actually Looks Like

There is a version of this story where the AI overrides the human, and everyone celebrates the machine. That is not what happened here. That is not how Carta Healthcare works.

Lighthouse surfaced a finding. The abstractor investigated it. She reviewed the evidence, confirmed the updated definitions, and made the final coding decision herself. The human had the last word. The AI just made sure she had the right information to make her call.

That is Hybrid Intelligence. Not AI replacing human judgment. AI making sure human judgment is informed, current, and accurate.



The Gap Where Errors Live

NCDR updates its definitions regularly. Sometimes the changes are minor. Sometimes, like with left ventricular dysfunction, they shift the boundaries between severity categories in ways that directly affect coding, revenue, and quality reporting.

Every health system has a gap between when a rule changes and when every abstractor knows about it. That gap might be two days. It might be two weeks. It might be longer. And inside that gap, cases are being coded under the wrong rules.

Lighthouse closes that gap. It keeps the definitions current so the abstraction team can focus on what they do best: applying clinical judgment, asking the hard questions, and using data to make patients' lives better.

In this case, Lighthouse did not just catch an error. It protected revenue. It improved data quality. And it earned the trust of an abstractor who walked in ready to prove it wrong.